

## AMENDMENTS

### In the Claims:

Please cancel claims 112, 113, 145 and 146 without prejudice to future prosecution in this or a related application.

Please amend claims 82, 83, 84, 114, 151, 173, 182, 198, 199, and 200 as follows:

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82. (Amended) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lipid anchor.

83. (Amended) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

84. (Amended) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method, and wherein said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety.

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114. (2x Amended) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, and wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method further comprising the step of positively separating said cells labeled with said product secreted by said cells, and wherein said product is labeled with a label moiety.

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151. (Amended) The kit of claim 150 further comprising a physiologically acceptable buffer.

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173. (Amended) A method to positively separate cells based on a product secreted by the cells comprising separating cells labeled with the product, wherein said cells have been coupled to a capture moiety that specifically binds a product secreted by said cells and wherein said cells have been cultured under conditions wherein the product is secreted and bound to said capture moiety, thereby producing cells labeled with said product, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, and wherein said capture moiety is coupled to said cells through an anchoring moiety.

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182. (Amended) A method to positively separate cells based on a product secreted by the cells comprising separating cells labeled with the product, wherein said cells have been coupled to a capture moiety that specifically binds a product secreted by said cells and wherein said cells have been cultured under conditions wherein the product is secreted and bound to said capture moiety, thereby producing cells labeled with said product, wherein said cells are not lysed by said method wherein said product is labeled with a label moiety, and wherein said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety.

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198. (Amended) A method to label cells with a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product,

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thereby labeling cells with said product, wherein said product is optionally labeled with a label moiety, wherein said cells are not lysed during said method, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lipid anchor.

199. (Amended) A method to label cells with a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is optionally labeled with a label moiety, wherein said cells are not lysed during said method, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

200. (Amended) A method to label cells with a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is optionally labeled with a label moiety, wherein said cells are not lysed during said method, and wherein said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety.

Please add the following new claims (claims 245-428):

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245. (NEW) A method to determine the proportion of cells, in a cell population, that are labeled with a product, wherein the cells labeled with the product secrete the product, said method comprising:

a) culturing a cell population, wherein cells of said cell population are coupled to a capture moiety that specifically binds a product secreted by at least some cells in said cell population, under conditions wherein the product is secreted and bound to said capture moiety, thereby producing cells labeled with said product; and

b) determining the proportion of cells in said cell population that are labeled with said product; wherein said cells are not lysed by said method.

246. (NEW) The method of claim 245, further comprising the steps of:

c) labeling the cells of said cell population with a second capture moiety that specifically binds a second product;

d) culturing said cell population under conditions wherein a second product is secreted and bound to said second capture moiety thereby producing cells labeled with said second product; and

e) determining the proportion of cells labeled with each product.

247. (NEW) The method of claim 246 further comprising the step of determining the amount and type of each product produced per cell labeled with product.

248. (NEW) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method,

and wherein

a) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

b) said capture moiety is coupled to said cells through an anchoring moiety, and

i) the anchoring moiety is a lipid anchor or

ii) the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

249. (NEW) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method,

wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin.

250. (NEW) A method to positively identify cells based on a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells wherein said capture moiety specifically binds the product, thereby labeling cells with said product, wherein said product is labeled with a label moiety, wherein said cells are not lysed during said method,

wherein said capture moiety is an antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody to the cell.

251. (NEW) A method to positively identify cells based on a product secreted by the cells, comprising the steps of:

- a) coupling said cells to a capture moiety;
- b) culturing said cells under conditions wherein the product is secreted and bound to said capture moiety, thereby labeling cells with a product secreted by said cells; and
- c) labeling said product with a label moiety, wherein said cells are not lysed during said method,

wherein

i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding

fragment thereof.

252. (NEW) A method to positively identify cells based on a product secreted by the cells, comprising the steps of:

- a) coupling said cells to a capture moiety;

b) culturing said cells under conditions wherein the product is secreted and bound to said capture moiety, thereby labeling cells with a product secreted by said cells; and

c) labeling said product with a label moiety, wherein said cells are not lysed during said method,

wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin.

253. (NEW) A method to positively identify cells based on a product secreted by the cells, comprising the steps of:

a) coupling said cells to a capture moiety;

b) culturing said cells under conditions wherein the product is secreted and bound to said capture moiety, thereby labeling cells with a product secreted by said cells; and

c) labeling said product with a label moiety, wherein said cells are not lysed during said method,

wherein said capture moiety is antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

254. (NEW) A method to positively separate cells based on a product secreted by the cells, comprising the steps of:

a) culturing cells coupled to a capture moiety under conditions wherein a product is secreted, wherein said product secreted by said cells specifically binds to said capture moiety, thereby producing cells labeled with said product wherein said cells are not lysed by said method, and wherein said product is labeled with a label moiety and wherein

i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding fragment thereof; and

b) positively separating said cells labeled with said product.

255. (NEW) A method to positively separate cells based on a product secreted by the cells, comprising the steps of:

a) culturing cells coupled to a capture moiety under conditions wherein a product is secreted, wherein said product secreted by said cells specifically binds to said capture moiety, thereby producing cells labeled with said product wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin; and

b) positively separating said cells labeled with said product.

256. (NEW) A method to positively separate cells based on a product secreted by the cells, comprising the steps of:

a) culturing cells coupled to a capture moiety under conditions wherein a product is secreted, wherein said product secreted by said cells specifically binds to said capture moiety, thereby producing cells labeled with said product wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, wherein said capture moiety is antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell; and

b) positively separating said cells labeled with said product.

257. (NEW) A method to determine the proportion of cells labeled with a product in a cell population, wherein the cells labeled with the product secrete said product, comprising the steps of:

a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety, wherein said product is labeled with a label moiety, and wherein

i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding

fragment thereof;

b) labeling the cells of step a) with at least one additional label moiety that does not label the product bound to said capture moiety; and

c) comparing the proportion of cells comprising secreted product bound to said capture moiety to the proportion of cells labeled with said label moiety, thereby determining the proportion of cells in the population that secretes the product; and

wherein said cells are not lysed by said method.

258. (NEW) A method to determine the proportion of cells labeled with a product in a cell population, wherein the cells labeled with the product secrete said product, comprising the steps of:

28 a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin;

b) labeling the cells of step a) with at least one additional label moiety that does not label the product bound to said capture moiety; and

c) comparing the proportion of cells comprising secreted product bound to said capture moiety to the proportion of cells labeled with said label moiety, thereby determining the proportion of cells in the population that secretes the product; and

wherein said cells are not lysed by said method.

259. (NEW) A method to determine the proportion of cells labeled with a product in a cell population, wherein the cells labeled with the product secrete said product, comprising the steps of:

a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety, wherein said capture moiety



wherein said capture moiety is antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell;

b) labeling the cells of step a) with at least one additional label moiety that does not label the product bound to said capture moiety; and

c) comparing the proportion of cells comprising secreted product bound to said capture moiety to the proportion of cells labeled with said label moiety, thereby determining the proportion of cells in the population that secretes the product; and

wherein said cells are not lysed by said method.

260. (NEW) A method to determine the amount of cells labeled with a product in a population of cells, wherein the cells are labeled with the product secrete said product, comprising the steps of:

29 a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety thereby producing cells labeled with said product, wherein

27 i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding fragment thereof; and

b) determining the amount of cells labeled with said product; and  
wherein said cells are not lysed by said method.

261. (NEW) A method to determine the amount of cells labeled with a product in a population of cells, wherein the cells are labeled with the product secrete said product, comprising the steps of:

a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety thereby producing cells labeled with said product, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin; and

b) determining the amount of cells labeled with said product; and  
wherein said cells are not lysed by said method.

262. (NEW) A method to determine the amount of cells labeled with a product in a population of cells, wherein the cells are labeled with the product secrete said product, comprising the steps of:

29 a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety thereby producing cells labeled with said product, wherein said capture moiety is antibody or antigen binding fragment thereof, 4.1 the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell; and

b) determining the amount of cells labeled with said product; and  
wherein said cells are not lysed by said method.

263. (NEW) A method to positively separate cells based on a product secreted by the cells comprising separating cells labeled with the product, wherein said cells have been coupled to a capture moiety that specifically binds a product secreted by said cells, wherein said cells have been cultured under conditions wherein the product is secreted and bound to said capture moiety, thereby producing cells labeled with said product, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, and wherein

i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

264. (NEW) A method to positively separate cells based on a product secreted by the cells comprising separating cells labeled with the product, wherein said cells have been coupled to a capture moiety that specifically binds a product secreted by said cells and wherein said cells have been cultured under conditions wherein the product is secreted and bound to said capture moiety, thereby producing cells labeled with said product, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin.

265. (NEW) A method to positively separate cells based on a product secreted by the cells comprising separating cells labeled with the product, wherein said cells have been coupled to a capture moiety that specifically binds a product secreted by said cells and wherein said cells have been cultured under conditions wherein the product is secreted and bound to said capture moiety, thereby producing cells labeled with said product, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, wherein said capture moiety is an antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

266. (NEW) A method to determine the amount of product produced per cell in a population of cells, comprising the steps of:

a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety thereby producing cells labeled with said product, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, and wherein

i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding fragment thereof; and

b) determining the amount of product produced per cell labeled with said product.

267. (NEW) A method to determine the amount of product produced per cell in a population of cells, comprising the steps of:

a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety thereby producing cells labeled with said product, wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin; and

b) determining the amount of product produced per cell labeled with said product.

268. (NEW) A method to determine the amount of product produced per cell in a population of cells, comprising the steps of:

a) culturing a cell population, wherein said cells of said population are coupled to a capture moiety which specifically binds a product secreted by said cells, under conditions wherein the product is secreted and bound to said capture moiety thereby producing cells labeled with said product, wherein said capture moiety is an antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell; and

b) determining the amount of product produced per cell labeled with said product.

269. (NEW) A method to label cells with a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a

capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, and wherein said product is optionally labeled with a label moiety, wherein said cells are not lysed during said method, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, and wherein

i) said capture moiety is coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety, or

ii) said capture moiety is coupled to said cells through an anchoring moiety, and

A) the anchoring moiety is a lipid anchor or

B) the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

270. (NEW) A method to label cells with a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, and wherein said product is optionally labeled with a label moiety, wherein said cells are not lysed during said method, and wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin.

271. (NEW) A method to label cells with a product secreted by the cells, comprising culturing said cells under conditions wherein the product is secreted and bound to a capture moiety coupled to said cells, wherein said capture moiety specifically binds the product, thereby labeling cells with said product, and wherein said product is optionally labeled with a label moiety, wherein said cells are not lysed during said method, wherein said cells are not lysed by said method, wherein said product is labeled with a label moiety, and wherein said capture moiety is an antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

272. (NEW) The method of claim 73 wherein the anchoring moiety is a lipid anchor.

273. (NEW) The method of claim 73 wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

274. (NEW) The method of claim ~~74~~ wherein the anchoring moiety is a lipid anchor.

275. (NEW) The method of claim ~~74~~ wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

276. (NEW) The method of claim ~~117~~ wherein the anchoring moiety is a lipid anchor.

277. (NEW) The method of claim ~~117~~ wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

278. (NEW) The method of claim ~~173~~ wherein the anchoring moiety is a lipid anchor.

279. (NEW) The method of claim ~~173~~ wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

280. (NEW) The method of claim ~~191~~ wherein the anchoring moiety is a lipid anchor.

281. (NEW) The method of claim ~~191~~ wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

282. (NEW) The method of claim ~~167~~ wherein the capture moiety is an antibody or antigen binding fragment thereof.

283. (NEW) The method of claim ~~282~~ wherein the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

284. (NEW) The method of claim 167 wherein said capture moiety is coupled to said cells through an anchoring moiety, wherein said anchoring moiety is a lipid anchor.

285. (NEW) The method of claim 167 wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

286. (NEW) The method of claim 168 wherein the capture moiety is an antibody or antigen binding fragment thereof.

287. (NEW) The method of claim 286 wherein the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

288. (NEW) The method of claim 168 wherein said capture moiety is coupled to said cells through an anchoring moiety, and said anchoring moiety is a lipid anchor.

289. (NEW) The method of claim 168 wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein said anchoring moiety is an antibody, or an antigen-binding fragment thereof.

290. (NEW) The method of claim 179 wherein the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

291. (NEW) The method of claim 189 wherein the capture moiety is an antibody or antigen-binding fragment thereof.

292. (NEW) The method of claim 291 wherein the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

293. (NEW) The method of claim 189 wherein said capture moiety is coupled to said cells through an anchoring moiety, and the anchoring moiety is a lipid anchor.

294. (NEW) The method of claim 189 wherein said capture moiety is coupled to said cells through an anchoring moiety, and the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

295. (NEW) The method of claim 71 wherein the label moiety is an antibody specific for the product.

296. (NEW) The method of claim 295 wherein label moiety is labeled either directly or indirectly with a fluorophore.

✓ 297. (NEW) The method of claim 295 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

298. (NEW) The method of claim 72 wherein the label moiety is an antibody specific for the product.

299. (NEW) The method of claim 298 wherein label moiety is labeled either directly or indirectly with a fluorophore.

300. (NEW) The method of claim 298 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

301. (NEW) The method of claim 115 wherein the label moiety is an antibody specific for the product.

302. (NEW) The method of claim 301 wherein label moiety is labeled either directly or indirectly with a fluorophore.



303. (NEW) The method of claim 301 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

304. (NEW) The method of claim 167 wherein the label moiety is an antibody specific for the product.

305. (NEW) The method of claim 304 wherein label moiety is labeled either directly or indirectly with a fluorophore.

306. (NEW) The method of claim 304 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

307. (NEW) The method of claim 168 wherein the label moiety is an antibody specific for the product.

308. (NEW) The method of claim 307 wherein label moiety is labeled either directly or indirectly with a fluorophore.

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309. (NEW) The method of claim 307 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

310. (NEW) The method of claim 172 wherein the label moiety is an antibody specific for the product.

311. (NEW) The method of claim 310 wherein label moiety is labeled either directly or indirectly with a fluorophore.

312. (NEW) The method of claim 310 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

313. (NEW) The method of claim 189 wherein the label moiety is an antibody specific for the product.

314. (NEW) The method of claim 313 wherein label moiety is labeled either directly or indirectly with a fluorophore.

315. (NEW) The method of claim 313 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

316. (NEW) The method of claim 190 wherein the label moiety is an antibody specific for the product.

317. (NEW) The method of claim 316 wherein label moiety is labeled either directly or indirectly with a fluorophore.

318. (NEW) The method of claim 316 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

✓ 319. (NEW) The method of claim 248 wherein the label moiety is an antibody specific for the product.

320. (NEW) The method of claim 319 wherein label moiety is labeled either directly or indirectly with a fluorophore.

321. (NEW) The method of claim 319 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

322. (NEW) The method of claim 249 wherein the label moiety is an antibody specific for the product.

323. (NEW) The method of claim 322 wherein label moiety is labeled either directly or indirectly with a fluorophore.

324. (NEW) The method of claim 322 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

325. (NEW) The method of claim 250 wherein the label moiety is an antibody specific for the product.

326. (NEW) The method of claim 325 wherein label moiety is labeled either directly or indirectly with a fluorophore.

327. (NEW) The method of claim 325 wherein label moiety is labeled either directly or indirectly with a magnetic particle.


328. (NEW) The method of claim 251 wherein the label moiety is an antibody specific for the product.

329. (NEW) The method of claim 328 wherein label moiety is labeled either directly or indirectly with a fluorophore.

330. (NEW) The method of claim 328 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

331. (NEW) The method of claim 252 wherein the label moiety is an antibody specific for the product.

332. (NEW) The method of claim 331 wherein label moiety is labeled either directly or indirectly with a fluorophore.


333. (NEW) The method of claim 331 wherein label moiety is labeled either directly or indirectly with a magnetic particle. 

334. (NEW) The kit of claim 151 ~~wherein~~ the physiologically acceptable buffer is cell culture media.

335. The method of claim 248 ~~wherein~~ the product is a cytokine.

336. The method of claim 249 ~~wherein~~ the product is a cytokine.

337. (NEW) The method of claim 253 ~~wherein~~ the label moiety is an antibody specific for the product.

 338. (NEW) The method of claim 337 ~~wherein~~ label moiety is labeled either directly or indirectly with a fluorophore.

339. (NEW) The method of claim 337 ~~wherein~~ label moiety is labeled either directly or indirectly with a magnetic particle.

340. (NEW) The method of claim 254 ~~wherein~~ the label moiety is an antibody specific for the product.

341. (NEW) The method of claim 340 ~~wherein~~ label moiety is labeled either directly or indirectly with a fluorophore.

342. (NEW) The method of claim 340 ~~wherein~~ label moiety is labeled either directly or indirectly with a magnetic particle.

343. (NEW) The method of claim 255 ~~wherein~~ the label moiety is an antibody specific for the product.

344. (NEW) The method of claim 343 wherein label moiety is labeled either directly or indirectly with a fluorophore.

345. (NEW) The method of claim 343 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

346. (NEW) The method of claim 256 wherein the label moiety is an antibody specific for the product.

347. (NEW) The method of claim 346 wherein label moiety is labeled either directly or indirectly with a fluorophore.

✓ 7 348. (NEW) The method of claim 346 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

349. (NEW) The method of claim 257 wherein the label moiety is an antibody specific for the product.

350. (NEW) The method of claim 349 wherein label moiety is labeled either directly or indirectly with a fluorophore.

351. (NEW) The method of claim 349 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

352. (NEW) The method of claim 258 wherein the label moiety is an antibody specific for the product.

353. (NEW) The method of claim 352 wherein label moiety is labeled either directly or indirectly with a fluorophore.

354. (NEW) The method of claim 352 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

355. (NEW) The method of claim 259 wherein the label moiety is an antibody specific for the product.

356. (NEW) The method of claim 355 wherein label moiety is labeled either directly or indirectly with a fluorophore.

357. (NEW) The method of claim 355 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

358. (NEW) The method of claim 260 wherein the label moiety is an antibody specific for the product.

359. (NEW) The method of claim 358 wherein label moiety is labeled either directly or indirectly with a fluorophore.

360. (NEW) The method of claim 358 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

361. (NEW) The method of claim 261 wherein the label moiety is an antibody specific for the product.

362. (NEW) The method of claim 361 wherein label moiety is labeled either directly or indirectly with a fluorophore.

363. (NEW) The method of claim 361 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

364. (NEW) The method of claim 262 wherein the label moiety is an antibody specific for the product.

365. (NEW) The method of claim 364 wherein label moiety is labeled either directly or indirectly with a fluorophore.

366. (NEW) The method of claim 364 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

367. (NEW) The method of claim 263 wherein the label moiety is an antibody specific for the product.

368. (NEW) The method of claim 367 wherein label moiety is labeled either directly or indirectly with a fluorophore.

1 369. (NEW) The method of claim 367 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

370. (NEW) The method of claim 264 wherein the label moiety is an antibody specific for the product.

371. (NEW) The method of claim 370 wherein label moiety is labeled either directly or indirectly with a fluorophore.

372. (NEW) The method of claim 370 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

373. (NEW) The method of claim 265 wherein the label moiety is an antibody specific for the product.

374. (NEW) The method of claim 373 wherein label moiety is labeled either directly or indirectly with a fluorophore. ✓

375. (NEW) The method of claim 373 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

376. (NEW) The method of claim 266 wherein the label moiety is an antibody specific for the product.

377. (NEW) The method of claim 376 wherein label moiety is labeled either directly or indirectly with a fluorophore.

378. (NEW) The method of claim 376 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

27 379. (NEW) The method of claim 267 wherein the label moiety is an antibody specific for the product.

380. (NEW) The method of claim 379 wherein label moiety is labeled either directly or indirectly with a fluorophore.

381. (NEW) The method of claim 379 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

382. (NEW) The method of claim 268 wherein the label moiety is an antibody specific for the product.

383. (NEW) The method of claim 382 wherein label moiety is labeled either directly or indirectly with a fluorophore.



384. (NEW) The method of claim 382 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

385. (NEW) The method of claim ~~250~~ wherein the product is a cytokine.

386. (NEW) The method of claim ~~319~~ wherein the product is a cytokine.

387. (NEW) The method of claim ~~320~~ wherein the product is a cytokine.

388. (NEW) The method of claim ~~269~~ wherein the label moiety is an antibody specific for the product.

389. (NEW) The method of claim ~~388~~ wherein label moiety is labeled either directly or indirectly with a fluorophore.

390. (NEW) The method of claim ~~388~~ wherein label moiety is labeled either directly or indirectly with a magnetic particle.

391. (NEW) The method of claim ~~270~~ wherein the label moiety is an antibody specific for the product.

392. (NEW) The method of claim ~~391~~ wherein label moiety is labeled either directly or indirectly with a fluorophore.

393. (NEW) The method of claim ~~391~~ wherein label moiety is labeled either directly or indirectly with a magnetic particle.

394. (NEW) The method of claim ~~272~~ wherein the label moiety is an antibody specific for the product.

395. (NEW) The method of claim 394 wherein label moiety is labeled either directly or indirectly with a fluorophore.

396. (NEW) The method of claim 394 wherein label moiety is labeled either directly or indirectly with a magnetic particle.

397. (NEW) The method of claim 321 wherein the product is a cytokine.

398. (NEW) The method of claim 325 wherein the product is a cytokine.

399. (NEW) A composition comprising viable cells labeled with a product secreted by said cells, wherein said cells are coupled to a capture moiety, wherein said product secreted by said cells is bound to said capture moiety, and wherein said product is labeled with a label moiety.

400. (NEW) The composition of claim 399 wherein said capture moiety is:

a) coupled to said cells through direct chemical coupling of the capture moiety to

components on the cell surface, optionally through a linking moiety or

b) coupled to said cells through an anchoring moiety, and

i) the anchoring moiety is a lipid anchor or

ii) the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

401. (NEW) The composition of claim 399 wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin.

402. (NEW) The composition of claim 399 wherein said capture moiety is an antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

403. (NEW) The composition of claim 400 wherein said capture moiety is an antibody or antigen-binding fragment thereof and the label moiety is an antibody or antibody fragment specific for the product.

404. (NEW) A composition comprising viable cells, wherein said cells are coupled to a capture moiety, wherein a product secreted by said cells is specifically bound to said capture moiety, and wherein said product is labeled with a label moiety that permits the labeled cells to be positively selected based on the presence of said label moiety.

405. (NEW) The composition of claim 404 wherein said capture moiety is:

a) coupled to said cells through direct chemical coupling of the capture moiety to components on the cell surface, optionally through a linking moiety or

b) coupled to said cells through an anchoring moiety, and

i) the anchoring moiety is a lipid anchor or

ii) the anchoring moiety is an antibody, or an antigen-binding fragment thereof.

406. (NEW) The composition of claim 404 wherein said capture moiety is coupled to said cells through an anchoring moiety, and wherein the anchoring moiety is a lectin.

407. (NEW) The composition of claim 404 wherein said capture moiety is an antibody or antigen-binding fragment thereof and the label moiety is an antibody or antibody fragment specific for the product.

408. (NEW) The composition of claim 405 wherein said capture moiety is an antibody or antigen-binding fragment thereof and the label moiety is an antibody or antibody fragment specific for the product.

409. (NEW) The composition of claim 406 wherein said capture moiety is an antibody or antigen-binding fragment thereof and the label moiety is an antibody or antibody fragment specific for the product.

410. (NEW) The composition of claim 404 wherein said capture moiety is an antibody or antigen binding fragment thereof, the antibody or antigen binding fragment thereof is bispecific, and the coupling is through specific binding of the antibody or antigen binding fragment thereof to the cell.

411. (NEW) The composition of claim 407 wherein the label moiety is an antibody specific for the product, and the label moiety is labeled either directly or indirectly with a fluorophore, radioactive isotope, chromophore or magnetic particles.

412. (NEW) The composition of claim 408 wherein the label moiety is an antibody specific for the product, and the label moiety is labeled either directly or indirectly with a fluorophore, radioactive isotope, chromophore or magnetic particles.

413. (NEW) The composition of claim 409 wherein the label moiety is an antibody specific for the product, and the label moiety is labeled either directly or indirectly with a fluorophore, radioactive isotope, chromophore or magnetic particles.

414. (NEW) The composition of claim 399 wherein the product is a cytokine.

415. (NEW) The composition of claim 400 wherein the product is a cytokine.

416. (NEW) The composition of claim 401 wherein the product is a cytokine.

417. (NEW) The composition of claim 402 wherein the product is a cytokine.

418. (NEW) The composition of claim 403 wherein the product is a cytokine.

419. (NEW) The composition of claim 404 wherein the product is a cytokine.

420. (NEW) The composition of claim 405 wherein the product is a cytokine.

421. (NEW) The composition of claim 406 wherein the product is a cytokine.

422. (NEW) The composition of claim 407 wherein the product is a cytokine.

423. (NEW) The composition of claim 408 wherein the product is a cytokine.

424. (NEW) The composition of claim 409 wherein the product is a cytokine.

425. (NEW) The composition of claim 410 wherein the product is a cytokine.

426. (NEW) The composition of claim 411 wherein the product is a cytokine.

427. (NEW) The composition of claim 412 wherein the product is a cytokine.

428. (NEW) The composition of claim 413 wherein the product is a cytokine.

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